DOCUMENT RESUME

ED 169 463 CG 013 477

AUTHOR Sharp, George Lawrence
TITLE The Effects of Manipulating Self-Concept on Learning and Classroom Performance.
PUB DATE Nov 77
NOTE 13p.; Paper presented at the Annual Meeting of the Rocky Mountain Educational Research Association (El Paso, Texas, November, 1977)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Achievement; *Behavior Change; Class Management; College Students; Counselor Role; *Performance Factors; *Self Concept; Self Esteem; Test Interpretation

ABSTRACT

In 1976, Muller and Spuhler found support for the proposition that self-concept influenced achievement. This experiment was designed to challenge their findings by demonstrating that when self-concept is lowered in a therapeutic manner, no deficit in achievement will result. The experimenter adjusted the self-concepts of college students regarding ability to learn a foreign language, and than measured performance on a paired-associates learning task. Subjects (N=16) were randomly assigned to one of four treatment conditions: self-concept lowered therapeutically, self-concept lowered counter-therapeutically, self-concept raised, and control. Self-concepts were raised or lowered by providing each subject with a false score on a foreign language aptitude test. When self-concept was lowered therapeutically, a very low aptitude score was presented nonjudgmentally and the acceptability of that score was emphasized. When self-concept was lowered counter-therapeutically, the score's unacceptability was emphasized. Each subject then learned a paired-associates task. The mean learning task performance level for the counter-therapeutically lowered group was inferior to those of the other three groups, which were equal. (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED169463

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

THE EFFECTS OF MANIPULATING SELF-CONCEPT ON LEARNING AND CLASSROOM PERFORMANCE

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

George L. Sharp

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

by

GEORGE LAWRENCE SHARP, Ph.D.

DEPARTMENT OF COUNSELING AND EDUCATIONAL PSYCHOLOGY
NEW MEXICO STATE UNIVERSITY
LAS CRUCES, NEW MEXICO

CG013477

PAPER PRESENTED TO THE
ROCKY MOUNTAIN EDUCATIONAL RESEARCH ASSOCIATION
ANNUAL MEETING, NOVEMBER 1977
EL PASO, TEXAS

INTRODUCTION

Phenominologists have long indicated that self-concept influences behavior. Educators have frequently suggested that classroom or achievement behaviors may be partially determined by self-concept. However, attempts to confirm this suggestion have been inconclusive.

To test the hypothesis that self-concept influences achievement, Muller and Spuhler (1976) manipulated the self-concepts of college freshmen by reporting false scores on a foreign language aptitude test and observing the resulting performance on a related task.

Subjects were divided into three groups: self-concept lowered (SCL), self-concept raised (SCR) and control (C). Regarding their ability to learn a foreign language, the SCL group was told that they were in the bottom fifth percentile, while the SCR subjects were told that they were in the top fifth percentile. Control subjects were informed that their scores were not available. Muller and Spuhler observed that subjects in the SCL group described themselves more negatively than the C or SCR groups. They also learned a subsequent paired associates learning task more slowly than the C or SCR subjects. It was concluded that lowered self-concept influenced performance. However, the results obtained by Muller and Spuhler may have been due to the way in which the positiveness of self-concept was lowered and not simply its lowering. That is, Muller and Spuhler may have countertherapeutically lowered self-concept by using nonsupportive judgmental feedback, which induced anxiety and resulted in a consequent impairment of learning.

Thus, the purpose of this experiment was to demonstrate that when self-concept is lowered in a counter-therapeutic manner, a learning deficit will result. It also attempted to demonstrate that lowering the positiveness of self-concept in a counter-therapeutic manner will elicit anxiety.

METHODOLOGY

Initially 270 college undergraduates voluntarily completed the Experimental Foreign Language Aptitude Test (EFLAT) and the trait anxiety scale from the State-Trait Anxiety Inventory (Spielberger, et al., 1970). The EFLAT consisted of a self-concept scale and two word learning-decoding tasks included to disguise the purpose of the experiment.

Qualified volunteers were randomly assigned to one of four treatment groups matched on pre-treatment self-concept and trait anxiety: self-concept lowered therapeutically (SCLT), self-concept lowered counter-therapeutically (SCLC), self-concept raised (SCR), and control (C). Both the self-concept lowered groups received information that they had scored in the bottom fifth percentile on the EFLAT. The SCLT group received this information in a supportive fashion while the SCLC group received that same information in a non-supportive judgmental manner. The SCR and C subjects received similar information to those in the Muller-Spuhler experiment.

Following treatment each subject was asked to retake the EFLAT for technical reasons. This data was used to assess self-concept change. Subjects were then asked to learn a "synthetic foreign language vocabulary list," as used by Muller and Spuhler. Stimulus shapes were presented by a slide projector and response terms via tape recorder. Training was organized into ten trial blocks. The task was interrupted between the second and third trial blocks and

state anxiety was assessed using the A-STATE scale of the State-Trait Anxiety Inventory.

At the end of each individual's participation in the experiment each subject was informed of the purpose of the experiment and that the results of the EFLAT were totally false and meaningless. The use of aptitude tests and how valid information regarding their abilities could be obtained was discussed.

RESULTS

The self-concept results are summarized in Table 1. A one-way analysis of variance was applied to pre- and post-treatment self-concept. The analysis revealed a significant F-ratio for the post-treatment data ($F = 24.47$; $df = 3, 60$; $p > .05$). A subsequent Newman-Keuls apply to all post-treatment means indicated that the mean self-concept scores for the SCLT and SCLC groups were significantly lower than those of the control and SCR groups. However, they were not significantly different from each other. Thus, positiveness of self-concepts, as measured by self-descriptive statements, were changed by the treatments. Prior to treatment the four group means were equivalent and following treatment the two lowered group means were significantly lower than those of the control and raised groups.

Performance on the paired-associates learning task is summarized in Figure 1. A two-factor mixed-design analysis of variance was applied to the paired-associates data, and revealed a significant trials effect ($F = 99.26$; $df = 3, 60$; $p > .05$) and a significant treatment effect ($F = 14.40$; $df = 3, 60$; $p > .05$), but failed to reveal a significant trials by treatment interaction. Overall treatment means were then compared using the Newman-Keuls procedure. This analysis indicated that the SCLC group learned significantly more slowly than each of the other groups, and that each of the other groups did not significantly differ from each other.

Table 2 presents the means and standard deviations for the

Table 1

Group Means and Standard Deviations of Self-Concept

Treatment Groups	Pre-Treatment	Post-Treatment	Change
SCR			
Mean	20.13	25.06	4.93
SD	3.60	4.96	
SCLT			
Mean	20.06	8.88	-11.18
SD	4.71	6.37	
SCLC			
Mean	20.56	11.75	- 8.81
SD	4.24	7.16	
C			
Mean	20.69	21.50	0.81
SD	4.16	5.61	

Table 2

Group Means and Standard Deviations of Anxiety

Treatment Groups	Pre-Treatment (A-Trait)	Post-Treatment (A-State)
SCR		
Mean	37.50	38.69
SD	8.31	9.47
SCLT		
Mean	37.44	43.19
SD	9.19	10.73
SCLC		
Mean	37.50	45.44
SD	6.24	12.17
C		
Mean	37.38	38.50
SD	6.72	8.02

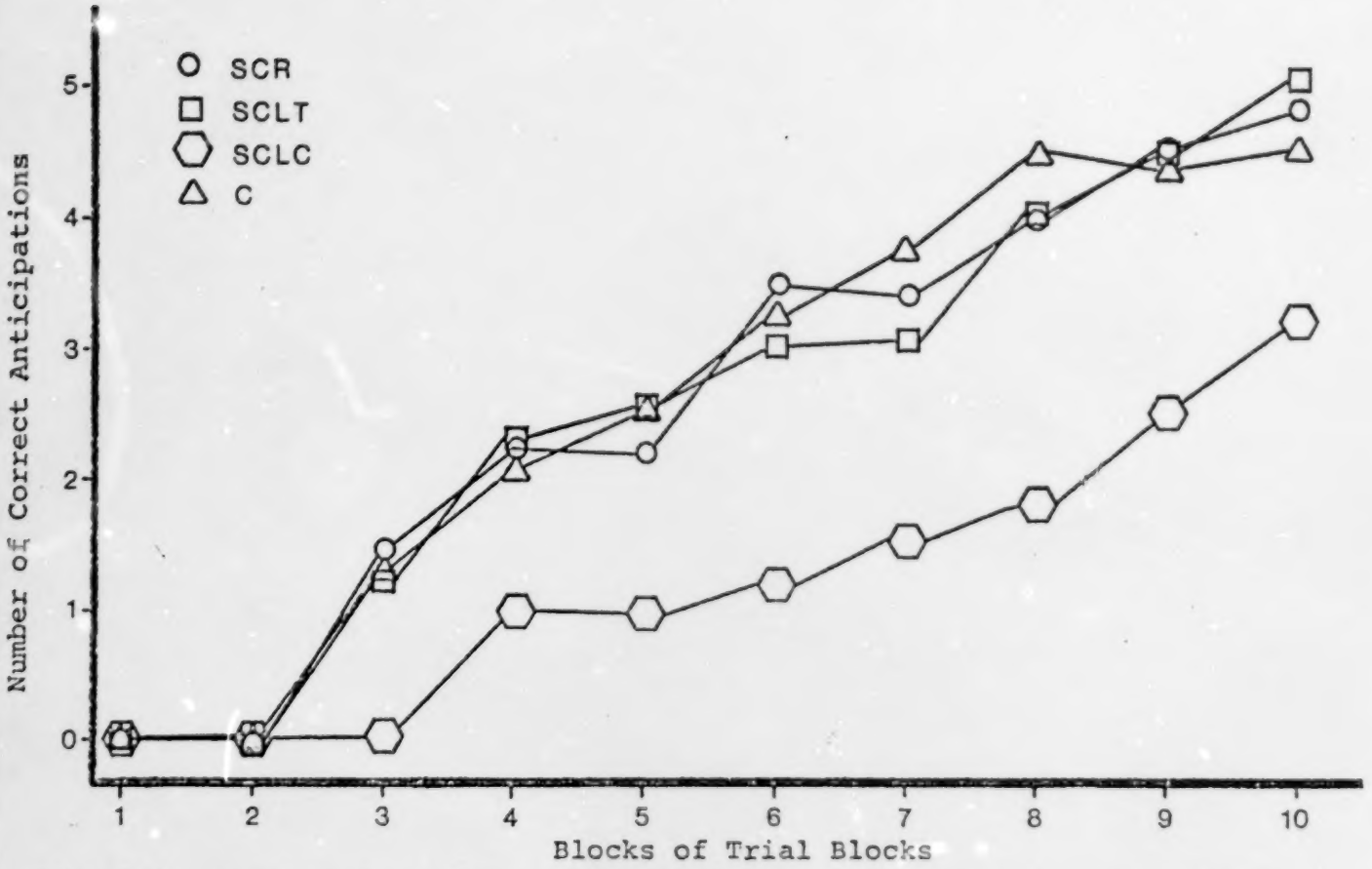

Figure 1 Mean number of correct anticipations by groups on the paired-associates learning task.

pre-treatment A-Trait and post-treatment A-State anxiety scores. Although there were no significant differences detected in anxiety due to treatment, the mean anxiety score for the SCLC group was higher than the other three groups. A clinical impression was that these subjects were exhibiting behaviors suggestive of emotional arousal more intensely than were subjects of the other groups.

DISCUSSION

The results indicate that the positiveness of self-concept, as measured by self-descriptive statements, was differentially changed by the treatments. Both lowered groups seemed to have been similarly affected by the information they received since there were no significant difference between them; however, they both had significantly lower self-concept scores than the control. The absolute level of positiveness of self-concept for the raised group following treatment was not significantly greater than the control group. These results suggest that students are more sensitive to the lowering effect than the raising effect.

The paired-associates learning task performances of the SCR, SCLT, and C groups were virtually identical, while the SCLC group's learning rate was significantly lower. Apparently, lowering positiveness of self-concept does not necessarily reduce rate of learning when the negative information is provided in a supportive nonjudgmental or therapeutic manner. However, when the same information is presented in a nonsupportive judgmental manner a substantial impairment to learning may be detected.

Although little can be said about anxiety, its presence may be detected using another approach.

This study fails to provide support for the proposition that simply altering the positiveness of self-concept will result in changes in ability to learn.

Accuracy of self-descriptive statements may provide a more viable basis for the decision-making process of students than enhancing positiveness of self-concept. The results of this experiment demonstrate that when the educator may find it necessary to adjust a student's self-concept downward, it can be done without negatively influencing learning if the educator remains cognizant of the therapeutic process.

REFERENCES

Combs, A.W. Intelligence from a perceptual point of view. Journal of Abnormal and Social Psychology, 1952, 47, 662-673.

Lane, J. "The effects of a self-concept enhancing operant reinforcing procedure on the self-concepts of selected elementary school students." Unpublished doctoral dissertation, New Mexico State University, 1975.

Lecky, P. Self-Consistency: A Theory of Personality, published by Kathryn Lecky, Inland Press, New York, New York and edited by Dr. John F. A. Taylor, 1945.

Muller, D. and Spuhler, R. The effects of experimentally induced changes in self-concept on associative learning. The Journal of Psychology, 1976, 92, 89-95.

Rogers, C.R. Client-centered therapy: Its current practice, implications, and theory. Boston: Houghton-Mifflin, 1951.

Snygg, D. and Combs, A.W. Individual Behavior: A Frame of Reference for Psychology. New York: Harper, 1949.

Spielberger, C., Gorsuch, R., and Lushene, R. State-Trait Anxiety Inventory Manual. Palo Alto, California: Consulting Psychologist Press, Inc., 1970.